

CORRESPONDENCE/MEMORANDUM

X copy
STATE OF WISCONSIN

Date: December 18, 1981

File Ref: 2300

To: Charles Higgs - Green Bay

From: James R. Huntoon



RECEIVED DNR

JAN 7 1982

Lake Mich. Dist.

Subject: Poygan Marsh Wildlife Area

At the December meeting, the Natural Resources Board approved the Conceptual Element of the subject Plan. No change was made to the Plan.

I was very impressed with the contents of this document. It was obvious that a considerable effort went into the Plan. Please extend to the appropriate personnel my thanks for a job well done.

I am enclosing extra copies of the final draft for your future use. I would suggest that the original be retained on file by the District Master Plan Coordinator. The original will serve as a district reference copy and provide the base for accommodating any future photocopying needs.

Please complete the Implementation Element of the Master Plan as outlined in the Master Plan Handbook and submit to this office by March 20, 1982.

Enc.

cc: R. Nicotera - ADM/5
J. Keener - WM/4

1037L

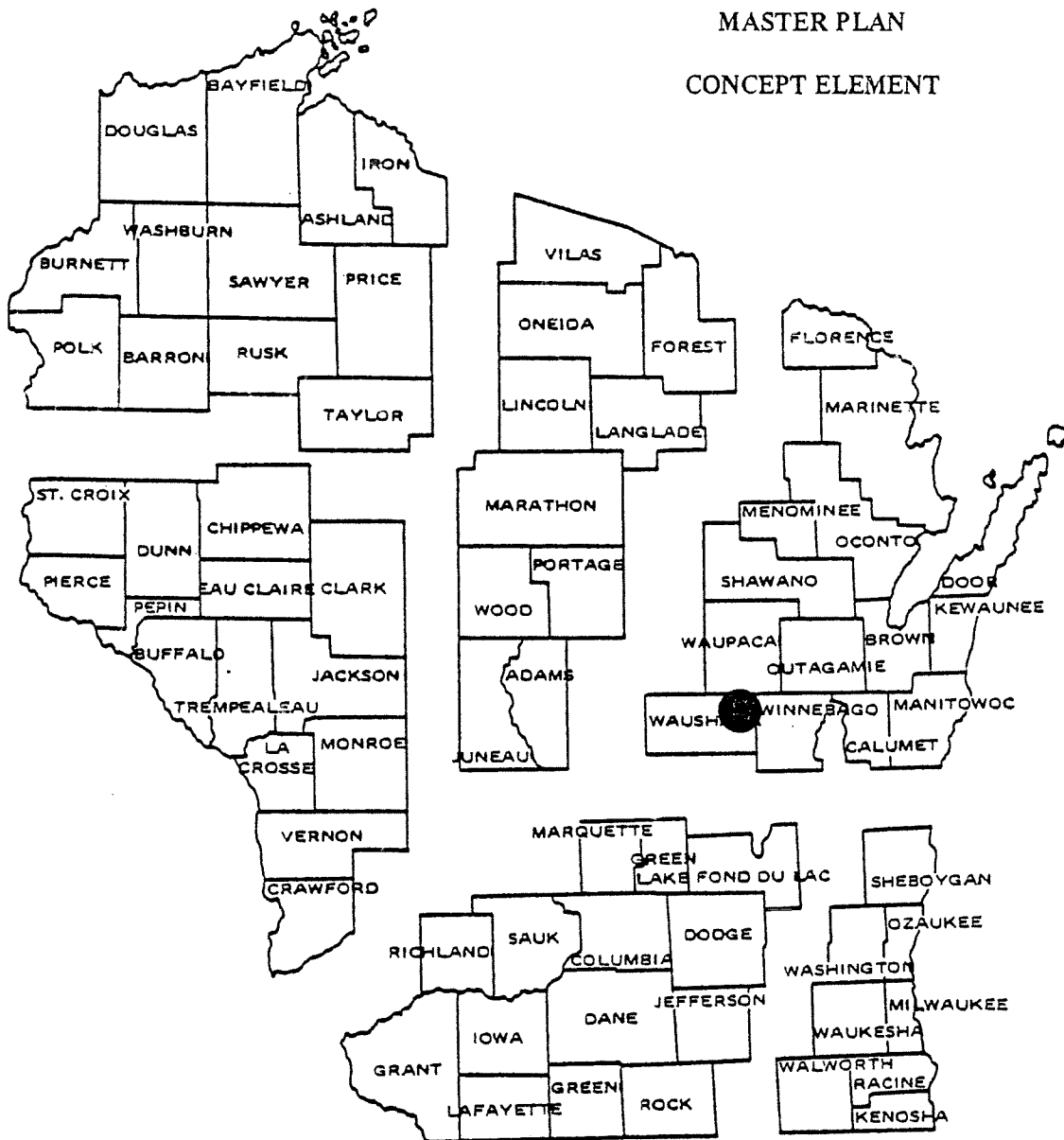
Walt Nantz

Please Follow Through
SF

POYGAN MARSH WILDLIFE AREA

MASTER PLAN

CONCEPT ELEMENT



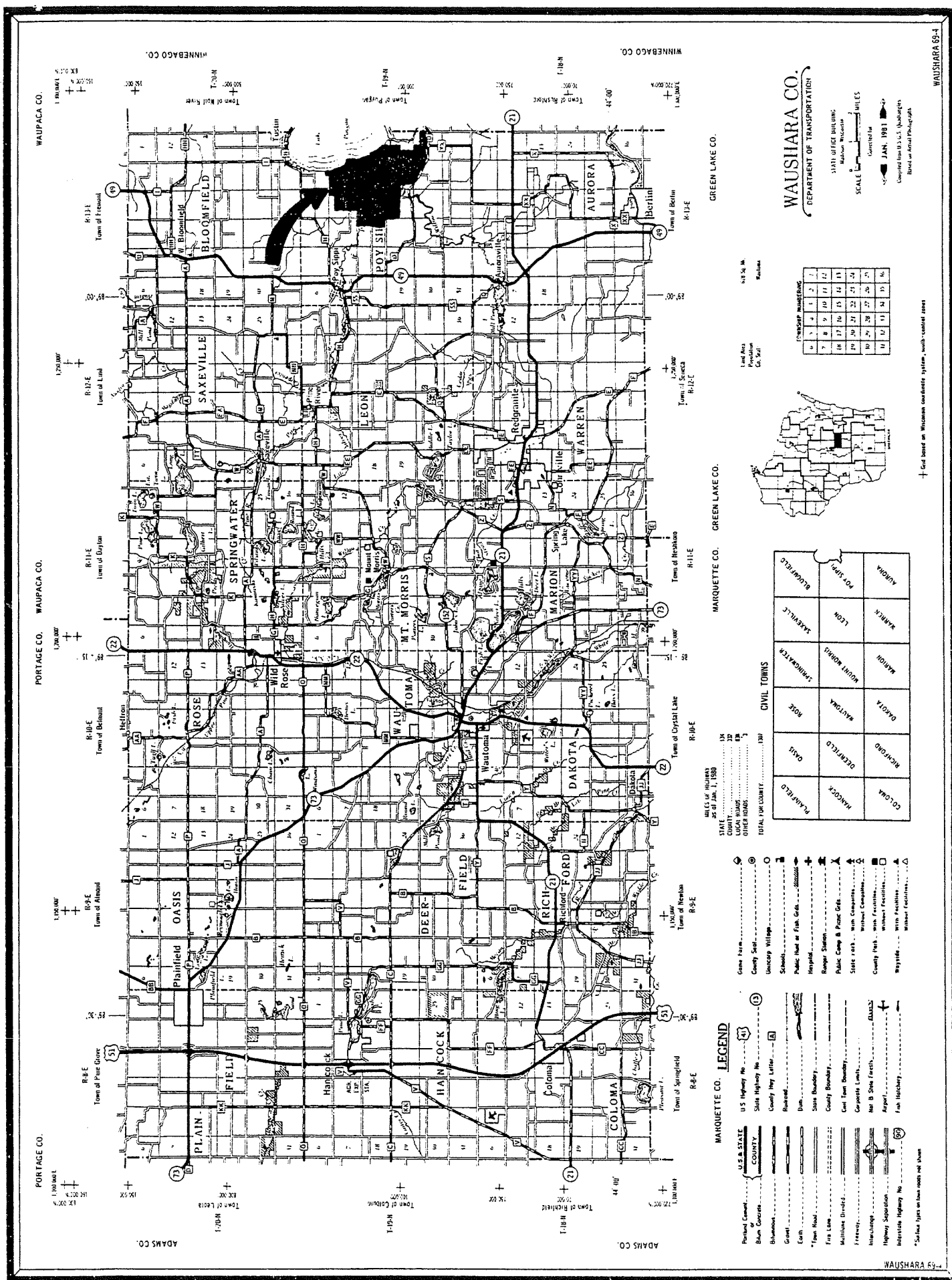
Property Task Force

Leader: TOM HOWARD, WILDLIFE MANAGER
MIKE PRIMISING, FISH MANAGER
MIKE FOLGERT, FORESTER/RANGER

Approved By:

Date:

C. J. Resolving
11-13-81



SECTION I - ACTIONS

	<u>Page</u>
GOAL AND OBJECTIVES	1
Goal	
Objectives	
Additional Benefits	
RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM	1
Development	
Management	
Land Acquisition	

SECTION II - SUPPORT DATA

BACKGROUND INFORMATION	6
History of the Property Creation	
Current Management Activities and Uses	
RESOURCE CAPABILITIES AND INVENTORY	8
Soils, Geology and Hydrology	
Fish and Wildlife	
Vegetative	
Water Resources	
Historical and Archaeological Features	
Land Use Potential	
MANAGEMENT PROBLEMS	13
NEEDS AND JUSTIFICATION	13
ANALYSIS OF ALTERNATIVES	14
Do Nothing	
Reduce Scope	
Enlarge Scope	
APPENDIX	16
A. Agency and Advisory Group Comments	
B. Public Meeting Summary	

SECTION I - ACTIONS

GOAL, OBJECTIVES AND ADDITIONAL BENEFITS

Goal:

To manage a state-owned wildlife area for the production of wetland wildlife as well as to provide public hunting, trapping, fishing and other compatible recreation and education.

Annual Objectives:

1. Provide 800 participant days of duck hunting opportunity while maintaining production of 1.5 ducks per acre on 500 acres of permanent water (750 ducks).
2. Provide an average harvest of 1,200 muskrats while providing 1,500 participant days of trapping opportunity.
3. Protect two historic site for scientific study and educational purposes.
4. Provide opportunities for 900 participant days of snowmobiling recreation associated with the county trail system.
5. Provide 1,000 participant days of deer hunting and harvest about 40 deer.

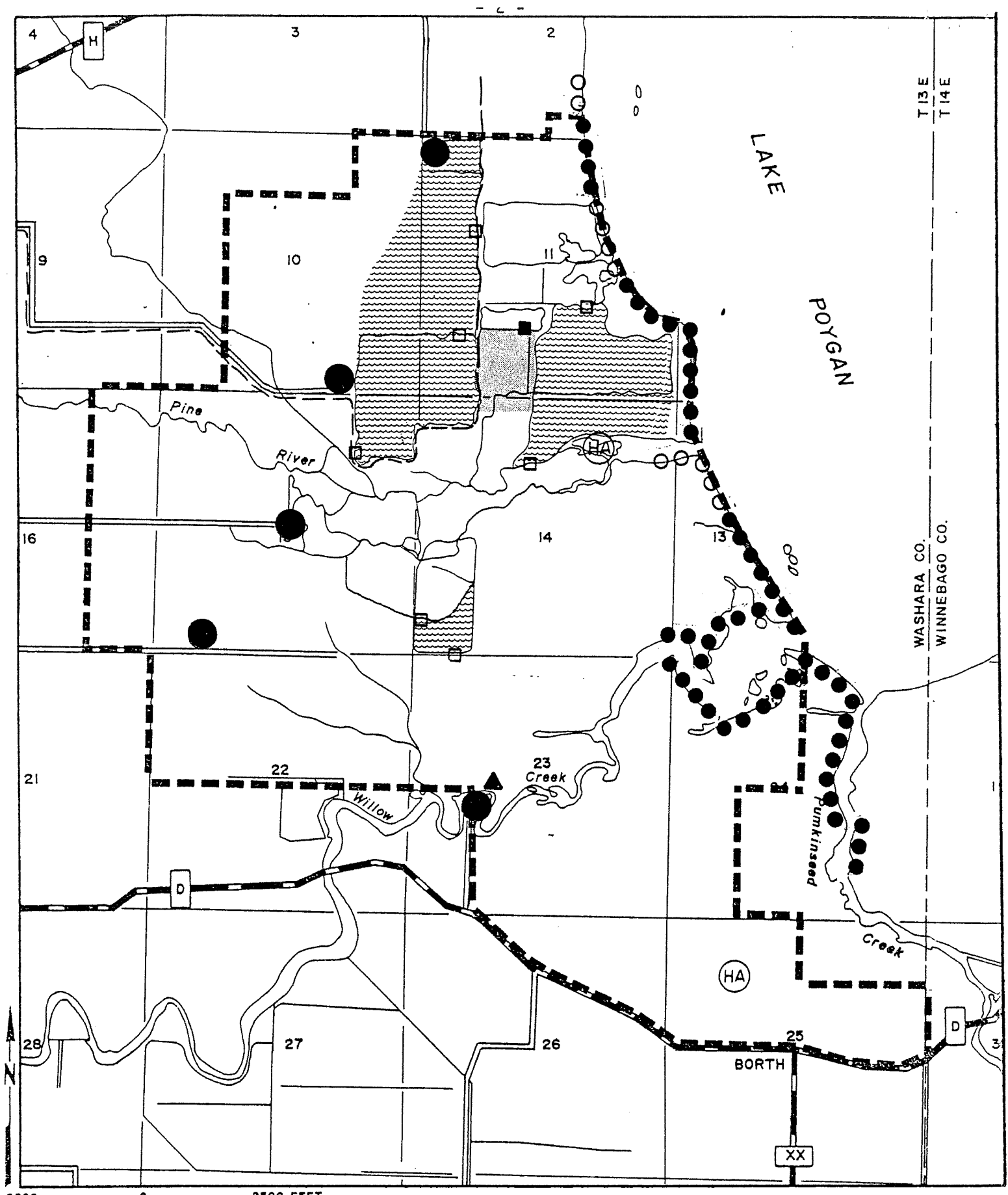
Annual Additional Benefits:

1. Provide 2,000 participant days of other recreation including small game hunting, fishing, hiking, cross-country skiing, dog training, showshoeing and nature observation.
2. Contribute to the habitat of other wildlife including migratory and resident endangered and threatened species.

RECOMMENDED MANAGEMENT AND DEVELOPMENT (Figure 2)

Development

A flowage of about 60 acres is proposed with the water control structure located at the northeast corner of the proposed flowage. Sufficient dikes are already extant but will require minor upgrading for approximately 1,400 feet. Installation of a rock-lined spillway on the north-south dike in Section 11 will prevent the washouts that periodically occur during spring runoff. A permanent gate to control vehicle access and subsequent dike damage is necessary where the town road ends on state property at the southern border of Section 15.



T13E
T14E

WASHARA CO.
WINNEBAGO CO.

POYGAN MARSH
WILDLIFE AREA
EXISTING AND PROPOSED
DEVELOPMENTS
FIGURE 2

LEGEND

- PROJECT BOUNDARY
- ▲ BOAT LAUNCHING AREA
- PARKING AREA
- WATER CONTROL STRUCTURE
- PROPOSED WATER CONTROL STRUCTURE
- SNOWMOBILE TRAIL
- (HA) ARCHAEOLOGICAL SITE
- ~~~~~ FLOWAGE AREA
- ~~~~~ PROPOSED FLOWAGE AREA
- RIPRAPPED SHORELINE
- PROPOSED RIPRAPPED AREA

Waterfowl production (primarily mallard, blue-winged teal and wood duck) has been negatively influenced by the lack of suitable nesting areas. Ongoing projects have included the development of about 20 small nesting islands and the erection of wood duck houses. Expansion of these management techniques depends upon evaluation of these developments. If increasing available nesting sites by creating small islands proves to be effective, the potential exists to implement as many as 5 more series of 20 islands each in scattered locations on the property. The property has sufficient wood duck habitat to support 50 additional wood duck houses.

Four private tracts need to be acquired before rip-rapping can be completed on the wildlife area. These sites are shown in Figure 2 and contain 1,700 feet of new construction and 1,400 feet of capping; the latter is located in Section 11. When completed, over six miles of shoreline will have been protected since 1972.

All areas of development will be examined for the presence or absence of endangered and threatened wild animals and wild plants. If such species are found, development will be suspended until the District Endangered and Nongame Species Coordinator is consulted, the site is evaluated, and appropriate protective measures taken. A similar effort will be utilized regarding historical or archaeological examinations by contacting the Historic Preservation Officer of the State Historical Society in advance of the initiation of any ground disturbance activity.

Management

Habitat management on this property has historically been directed towards attracting waterfowl for recreational hunting. Late summer flooding provides about 450 acres of suitable waterfowl use area within three separate impoundments. Impoundments are dewatered after the waterfowl season and kept at the lowest possible water level throughout the winter and summer months to minimize muskrat damage.

Annual maintenance of dikes to repair muskrat damage is necessary to ensure watertight integrity of impounded areas in the fall. However, periodic maintenance has not kept pace with continued dike deterioration and some dikes currently only slow the rate of runoff rather than create static, flooded areas within impoundments. Dike maintenance activities during 1981 through an approved waterfowl stamp funded project should restore most dikes to fully operational status by the end of the year. Maintenance of dikes through repair of muskrat-damaged areas should be an annual activity at a cost of \$800 - \$1,200/year.

The waterfowl production capability of this wildlife area will be enhanced through alternate summertime flooding of impounded areas. It has become apparent that some degree of muskrat damage will occur regardless of the fact that impoundments are flooded only three months during the year. It is recommended that two of the three impoundments be flooded from April to late November to provide additional brood-rearing areas and to discourage the present rate of succession to woody vegetation. The third impoundment may continue to be operated as it has been in the past.

Each impoundment will be drawn down throughout the growing months one year in every three. This practice should promote moist soil aquatics for waterfowl in addition to discouraging woody vegetation. Periodically, marsh hay cutting permits will be issued to area farmers to maintain grassy cover and prevent woody vegetation invasion.

Prescribed burning has been carried out within flowage boundaries in the past on an infrequent basis to control brush invasion but burning in other wetland areas cannot be accomplished because of disjunctive state ownership of marsh areas. Burning may be continued as needed in impoundments during the drawdown year.

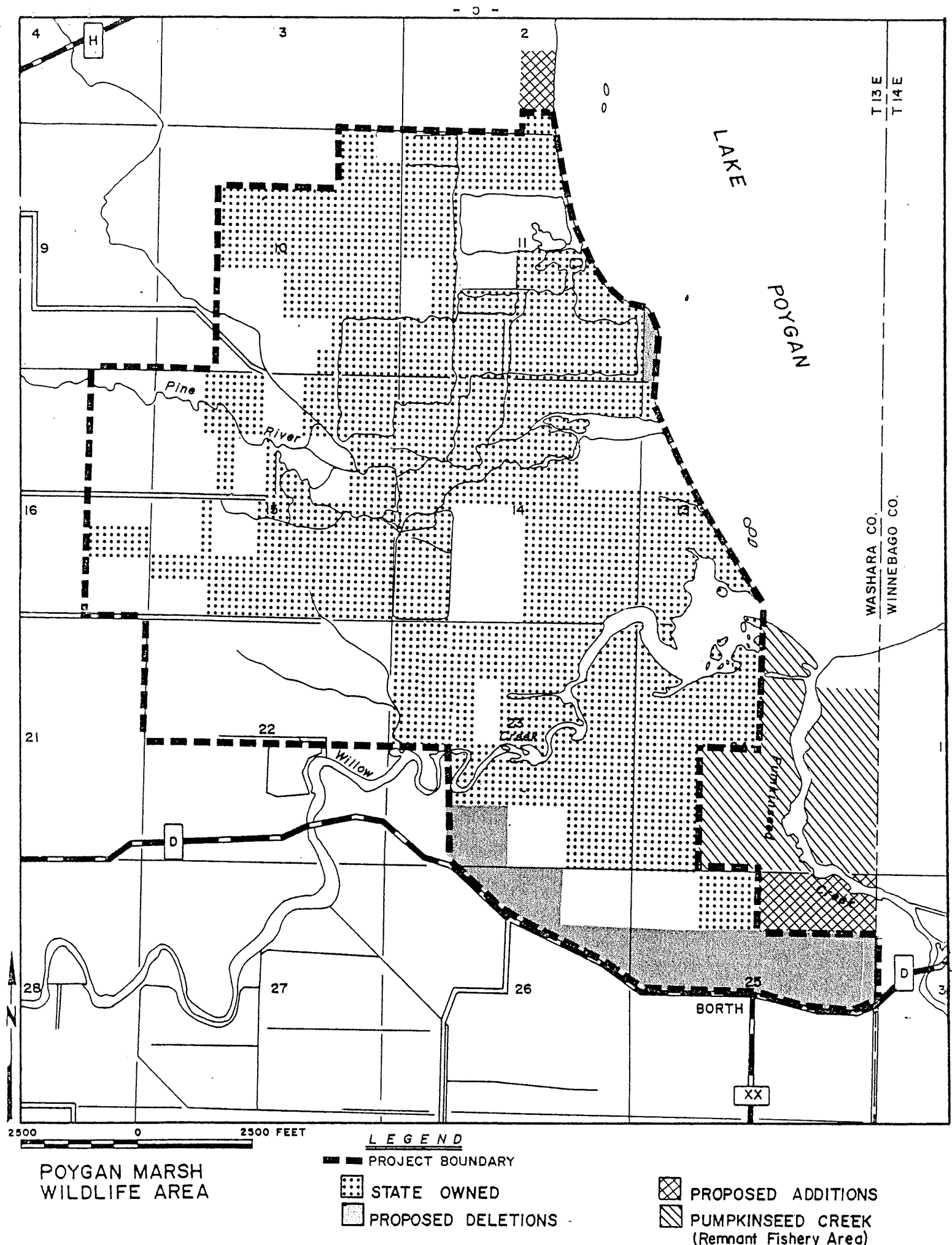
Over 5.7 miles of state-owned shoreline on this lake has been stabilized with rock riprap since 1972. The latest riprap work was done during the 1979-80 winter. In the past, it has become necessary to cap some riprap with additional rock as the initial rock shifts and sinks after being placed. It is anticipated that some degree of such "capping riprap" may become necessary during the next few years. A reasonable estimate of such maintenance is that about 1,500 feet of shoreline will require .5 yards of rock/lineal foot within the next three to four years at an estimated cost of \$9.00 to \$10.00/yard installed.

Land use agreements governing the designation of snowmobile trail corridors will be issued. A complete biological inventory will be conducted as funds permit.

Land Acquisition (Figure 3)

The State currently owns 2,536.42 of a goal of 4,054.3 acres. It is recommended that the boundary and acquisition goal be revised as follows:

1. Addition of a 34-acre parcel in the SE of Section 2. The addition of this parcel will place within acquisition boundaries the last unprotected shoreline on Lake Poygan's west shore. Once this parcel is acquired, the shoreline will be riprapped to protect the wetlands to the west from continued erosion and to protect wetlands lying southwest of the exposed north deadend of riprap.
2. Addition of 80 acres in the N 1/2 of the NE 1/4 of Section 25. This parcel contains frontage on the Pumpkinseed Creek and is bisected by a small drainage tributary to that waterway. Adjacent wetlands are predominately deep freshwater marsh areas which provide some excellent waterfowl brood-rearing habitat. Addition of this 80 acres would also provide block ownership of state land in this portion of the property. More importantly, from a resource protection standpoint, acquisition of this area will preserve excellent spawning areas for northern pike, largemouth bass, assorted panfish and, to a lesser extent, walleye.



3. Deletion of 19.68 acres in Section 12. Although plat maps show 10 acres in Section 12 on the shoreline of Lake Poygan, erosion has caused over nine acres of land to be washed into the lake. Erosion was halted on the section line between Sections 11 and 12 through riprap development on state land. No useful public value would be provided by purchasing the remaining private land.
4. Deletion of 297.3 acres in Sections 23, 25 and 26. These lands currently have various developments including a church, a small subdivision and other residences which preclude use as a wildlife area.
5. Incorporation of 335 acres of Remnant Fishery Area (Pumpkinseed Creek) into the Wildlife Area for uniform management purposes. The Remnant Fishery Area goal would be reduced accordingly.

Land Control Summary:

Current acreage goal	4,054.30
Additions	34.00
	80.00
	335.00
Sub-total	4,503.30
Deletions	-297.30
	- 19.68
New acreage goal	4,186.32
(Acreage goal adjustment	+132.02)

Completed acquisition of this wildlife area, at 1981 property values, would cost approximately \$800,000.00.

Land acquisition has become increasingly more difficult on this property over time. Currently, less than 100 acres are purchased as additions to the wildlife area annually. Acquisition on this property will probably not approach completion before the year 2000.

SECTION II -- SUPPORT DATA

BACKGROUND INFORMATION

History of the property creation:

The Poygan Marsh Wildlife Area was initiated in 1958 with the purchase of a 637-acre tract of marshland near the southwest shore of Lake Poygan through which runs the Willow Creek. The primary purpose of this wildlife area was to preserve the marsh area as a public hunting and trapping area. The property was purchased by the State of Wisconsin and the U.S. Department of the Interior pursuant to the Federal Aid in Fish and Wildlife Restoration Acts.

In 1959, Amendment #1 to the preliminary project statement provided for the acquisition of an additional 24 tracts of land which totaled 1,335 acres. A second amendment to this acquisition project was proposed in 1965 to add an additional 56 tracts totalling 1,702 acres. Approval was granted to change the acquisition boundary in 1969 which added 9 more tracts and 340 acres to the Poygan Wildlife Area acquisition project. The present property acreage goal is 4,054.3 acres within an approved boundary encompassing acres.

Current Management Activities and Uses:

The property currently receives heavy use by the public for hunting and trapping. Estimates of recreation days produced include:

Waterfowl hunting -	800
Deer hunting -	1000
Upland small game hunting -	1000
Trapping -	1500
Nonhunting recreation and education -	1000

Management activities have primarily been directed towards enhancing the area's attractiveness for migrating waterfowl during the fall. About 450 acres of wetlands are impounded by approximately 27,000 feet of dike. Seven control structures impound runoff and stream source waters in September. These impoundments are opened after the waterfowl hunting season to release water in order to minimize muskrat damage to dikes. About 9,000 feet of dike is in poor condition and must be annually repaired in order to retain impoundment integrity. The remaining dike is in good to excellent condition.

Other waterfowl habitat management on the large type II and III impounded wetland areas has been limited to occasional burning to retard vegetation succession to shrub-carr and to the allocation of permits to local farmers for marsh hay cutting. An experimental project in 1980 within one of the impoundment areas resulted in the construction of 20 waterfowl nesting islands measuring about 30 feet square each.

About 50 years ago, water levels on the upriver lakes were raised by a dam at the outlet of Lake Winnebago. Within the last 25-30 years the combination of higher water levels, wind action and shoreline development has destroyed much of the marsh habitat bordering these lakes. To prevent further deterioration of these marshes, rock riprapping was employed by both private landowners and the Department of Natural Resources. The Lake Poygan marshland shorelines within Poygan Wildlife Area (and a short segment of Rat River Wildlife Area) were riprapped during the late winters of 1972, 1974, 1977, and 1980. This can only be accomplished by trucking rock over the ice during extremely cold winters. A total of 30,151 lineal feet of shoreline has been riprapped to date with 41,541 cubic yards (51,926 tons) of rock at a cost of \$168,590.00. To date, 95% of the shoreline areas within DNR boundaries has been stabilized through these ORAP funded riprapp projects.

The Waushara County Snowmobile Association maintains a county trail system in cooperation with the Waushara County Park Commission. One trail in the eastern part of Poy Sippi Township leaves Lake Poygan and enters the wildlife area on dikes bordering the south ends of impoundments in Sections 10 and 11. The trail continues northward along the west side of the impoundment in Sections 10 and 11 and leaves the public land in Section 10 near the northeast corner of the property. These trails are maintained by the county snowmobile association through land use permits administered by the property manager.

There are 5 parking lots and 500 yards of access trail which require periodic maintenance. Two major property signs and various informational posting and three barrier gates also require upkeep as necessary. Permanent gates constructed of well casing and heavy pipe have proven necessary to control unauthorized vehicle use on dikes.

RESOURCE CAPABILITIES AND INVENTORY

Soils, Geology and Hydrology

The Poygan Marsh Wildlife Area is entirely contained within the boundaries of a glacial-lake basin which includes much of the eastern 1/3 of the county and extending eastward through Winnebago County.

Lacustrine clay deposited in glacial Lake Oshkosh and fluvial sand and gravel deposited by the meltwater of the Green Bay Lobe (now covered by organic deposits on the wildlife area) cover this entire area. Interstratified beds of clay, sand, and gravel contain numerous flowing wells. Several flowing wells are located on the wildlife area and on adjacent farmland.

Soils found on the property are predominately poorly drained organic deposits overlying clay and/or sand sedimentary deposits. Slopes over the entire property range from 0 to 2 percent. Much of the land is annually inundated by water, especially along the margins of the streams, sloughs, and lake. The limitations of these organic soils of the Tustin, Houghton, Poy, and Willette series preclude such developments as buildings, sanitary landfill areas, sewage lagoons, etc. Some mixed clays in the Poy series will support a bottomland hardwoods forest type; the remainder of the property contains deep organic deposits generally incapable of supporting a forest type. Soils are generally slightly acidic to slightly alkaline.

Fish and Wildlife

The wetlands contiguous to the confluences of the waterways terminating at Lake Poygan provide a valuable warm water fish species spawning area. Yellow perch and northern pike are the predominate species utilizing this spawning area. The lower reaches of the Pine, Pumpkinseed, and Willow Creek waterways support a perch-northern pike fishery and seasonal white bass and walleye fishing. Management of the land resource of this property has an important impact on the fishery resources of Lake Poygan. Nearly \$170,000 has been spent since 1972 to stabilize the state-owned shoreline on this property, preventing the destruction of the shoreline and subsequent destruction of marsh habitat with attendant deterioration of lacustrine habitat.

Lake Poygan's fishery includes lake sturgeon, walleye, northern pike, and panfish species as well as other game fish and cyprinids. The striped shiner (endangered) and pugnose shiner (threatened) have been located within Lake Poygan. Rough fish species present include freshwater drum, carp and suckers. A rough fish removal program is carried on by contract with commercial fishermen.

Furbearers common to the wildlife area include raccoon, red fox, muskrat, mink and otter. Ruffed grouse and woodcock are found within the wooded lowland area and large numbers of deer are found throughout the area. The major waterfowl species utilizing the property are mallard, teal, and wood duck. A variety of other puddle duck species have been noted on the property and the lake area adjacent to the property receives annual use by several thousands of diver ducks, including canvasback, redhead, scaup, and others.

Nongame species noted on the area include sandhill crane, American bittern, least bittern, green heron, black tern, a variety of shorebirds, painted turtle, leopard frog, green frog, fox snake, northern red bellied snake, snapping turtle, garter snakes, water snake, deer mice, moles, jumping mice, voles and other microtine species, marsh wrens, red-winged blackbirds, marsh hawk, red-tailed hawk, great horned owl, saw-whet owl, barred owl, screech owl, and a variety of passerine species.

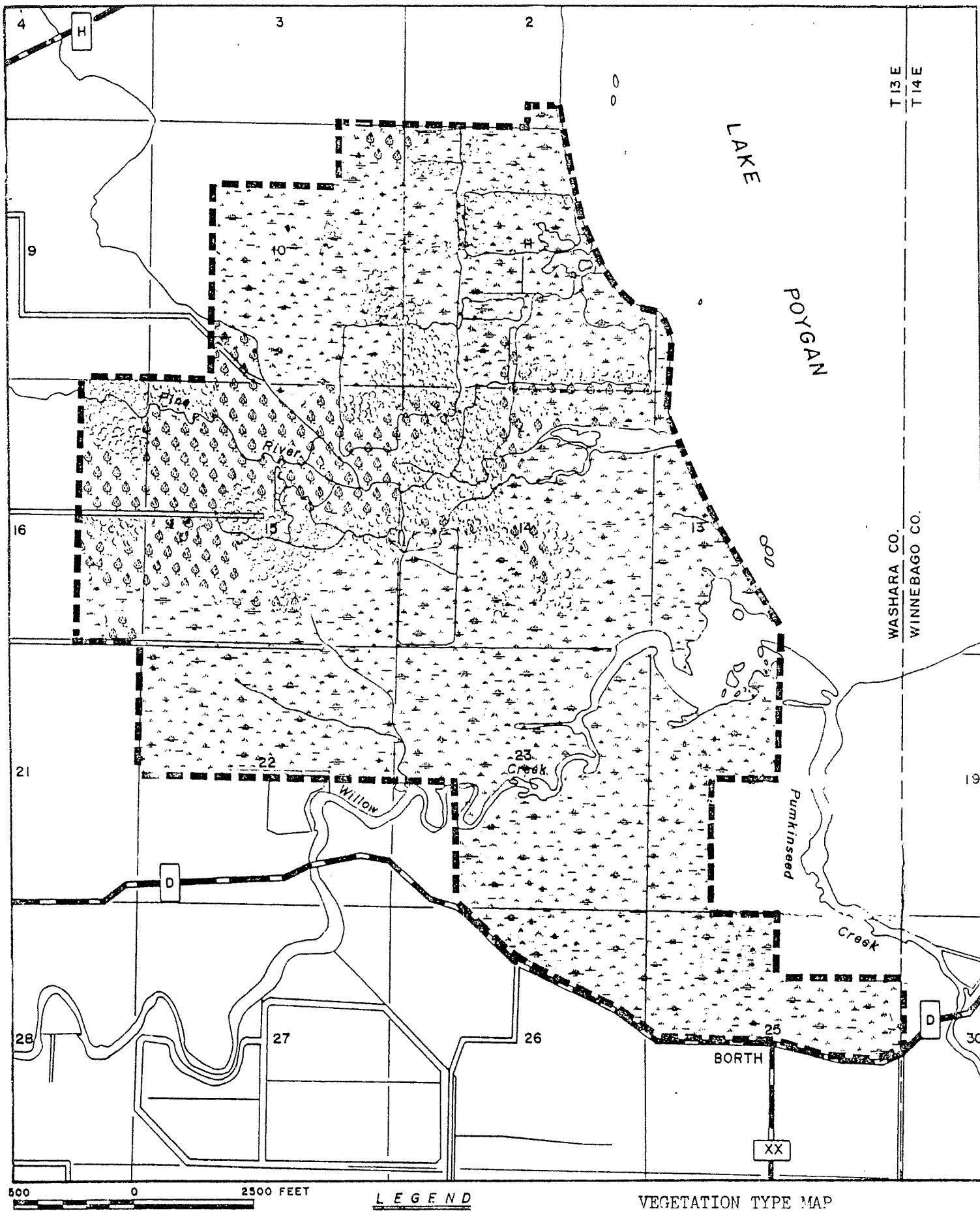
A survey to determine the status of nongame, endangered, and threatened species has not been done on this property. Although there is a large nesting colony of Forster's terns on Lake Poygan, there is no record of any endangered or threatened species on the wildlife area.

Vegetation (Figure 4)

A shallow, freshwater marsh community is present over more than two-fifths of the wildlife area. This vegetative community is composed of various sedges and wetland grass species with scattered cattail stands in wetter areas. Small isolated stands of wild rice are found within these type III wetland areas. Within type II wetland areas, canary grass is periodically harvested as marsh hay to retard vegetative succession to shrub swamp. About one-fifth of the property is characterized by a shrub swamp vegetative community. Willow and dogwood brush cover a sedge-canary grass community in these areas.

Wild celery, coontail, wild rice and various pond weeds are found in shallow water at the mouths of the streams that enter the lake on the property. Managed flowages produce a variety of wetland associated forbes, including smartweed, tearthumb, marsh marigold, nettles, arrowhead, and others.

The acreage of commercial forest land is 450 acres, less than 20% of the property area. The only timber type is swamp hardwoods composed of the species of red maple, black ash and American elm. Minor components of the timber type are swamp white oak and scattered shagbark hickory.



POYGAN MARSH
WILDLIFE AREA

FIGURE 4

A forest reconnaissance of the property in 1980 verified a low timber productivity potential. The two timber stands on the property are a swamp hardwood small sawlog stand (SH 11-15") and a swamp hardwood pole timber stand (SH 5-11"). The density of saw timber stand is poor to medium with a range of volumes of 1,800 to 5,300 board feet per acre. The average is 3,500 board feet per acre. The pole timber stand has a volume range of 7 to 22 cords per acre with an average of 12 cords per acre.

Low densities of seedling reproduction exist because of poor conditions for germination, due to flooding. No opportunities exist for reforestation.

The opportunity for commercial timber sales are limited due to low volumes, poor access, and low quality merchantable timber. The lack of improved access roads and the year around high water table make the stands accessible only to winter logging.

The alternatives to commercial timber sales are intermediate thinnings for fuel wood or no harvests. Any timber harvest activity will be coordinated for wildlife and aesthetic benefits.

No endangered or threatened species of wild plants are known to be present.

Water Resources

The Pine River, Pumpkinseed Creek and Willow Creek terminate in Lake Poygan within the wildlife area. About 1 1/2 miles of Pumpkinseed Creek, nearly 2 miles of Willow Creek and over 2 miles of (including tributaries), of Pine River are contained within the property boundary.

The Pine River is over 28 miles in length with an average gradient of about six feet per mile. The upper 19.1 miles of this stream is classified as a Class I trout stream, followed by 4.7 miles of Class II trout stream. That portion of the stream lying below the Poy Sippi Millpond and continuing on to Lake Poygan through the wildlife area is not classified as trout water.

Pumpkinseed Creek is 13.6 miles in length and is a low gradient hardwater stream which flows from Winnebago County into Waushara County, where it enters Lake Poygan through the southeast corner of the wildlife area. This is a warm water stream that supports a fishery similar to that of Lake Poygan.

Willow Creek is 33.9 miles in length with an average gradient of about 6.6 feet per mile. The upper one third is Class I trout water and the middle is Class II trout water. The remainder is nontrout water, including that portion that runs through the wildlife area.

Numerous small tributaries and secondary channels of these streams traverse the wildlife area through ditches and natural drainage channels. These three waterways form confluences with Lake Poygan within an area comprising less than one mile of shoreline. Floating bog areas, silt accumulations, and many meanders characterize this wetland region.

About 9 miles of dikes exist on the property and control water levels within gravity flow impoundments. The resultant ditches add to the surface water resource of the property. Impoundments include three in the 100 to 150 acre range size and one 40 acre impoundment. These impoundments have been seasonally flooded to attract waterfowl during the fall. About 50 acres at the mouth of Willow Creek and 20 acres at the mouth of the Pine River provide additional open water areas on the property.

A breakdown by wetland types (USFWS Circular 39) on the property includes:

Type II	5%	Type III	36%	Type IV	6%
Type V	4%	Type VI	20%	Type VII	24%
Type VIII	5%				

Poygan Lake is a shallow glacial remnant lake of 14,102 acres and forms the eastern boundary of the wildlife area. It is part of the upriver lakes complex of Lakes Butte des Morts, Lake Winneconne and Lake Poygan which include a total of nearly 29,000 acres at the confluence of the Fox and Wolf River Watersheds. Over 6 miles of shoreline of Lake Poygan are included within approved boundaries of the wildlife area of which 5.7 miles has been stabilized with rock riprap to protect the fragile wetland area shorelines.

Historical and Archaeological Features:

The Historic Preservation Division of the State Historical Society of Wisconsin has a record of two prehistoric campsites within the wildlife area, and an additional two campsites and a village nearby. The campsites within the wildlife area include:

Ws - 104: A campsite located just west of the confluence of the Pine River and Lake Poygan in the NE of Section 14, T. 19 N., R. 13 E.

Ws - 122: A campsite located one mile south of Lake Poygan in the SW NE NW of Section 25, T. 19 N., R. 13 E.

It is highly probable that there may be other archaeological sites in the wildlife area as the area has not been systematically surveyed for cultural material. The State Historical Preservation Officer will be consulted before any ground disturbance activities are conducted.

Land Use Potential:

Land with the potential for designation as various resource protection areas or intensive recreational development areas does not exist on this property. The nature of land and water use in the past involved drainage, level ditching, artificially high water levels on adjacent lake areas and various other activities that altered the original characteristics of the area. The entire property was purchased as a fish and wildlife area and is best suited for designation as a Fisheries and Wildlife Management Area (RD₂). The physical and biological features of the area, potential for resource management activities and heavy recreational use make this classification appropriate.

MANAGEMENT PROBLEMS

Much of the wetlands lying between the Willow Creek to the south and the Pine River to the north are slowly reverting to a shrub-carr type through successional change. The use of prescribed burning to reverse this trend is not feasible because of private inholdings in this area. Acquisition of six parcels of land will be necessary before this area may be managed through controlled burning.

Dike deterioration as a result of muskrat activity has been a problem on several thousand feet of dike that was constructed of organic soils. These dikes were originally spoil banks resulting from ditches constructed by private landowners prior to state ownership. The ditches were dug to increase the carrying capacity of these wetlands for muskrats and not as water-retaining devices. As such, they are composed of organic, easily leached soil and do not have the structural shape and capabilities of impoundment dikes. Later, the spoil banks were modified to act as dikes.

Complete reconstruction of these dikes is cost-prohibitive when compared to the cost of annual maintenance even over a very long-term basis. Annual maintenance will continue to be necessary in order to retain operational integrity of these systems.

NEEDS AND JUSTIFICATION

The demands for fish and wildlife resources and associated recreational and educational opportunities have been steadily increasing. In 1975, Wisconsin hunters and anglers spent over 50 million days enjoying these recreational pursuits which, by 1990, is expected to reach 66 million days. The current demand for our fish and wildlife resource is generated by over 2 1/4 million users. The user demand for nonharvest uses of these resources such as hikers and photographers is generated by as many as 4 million people.

The Poygan Marsh wildlife area is within reach of the large populations centers along the Fox River Valley and southeastern Wisconsin including Appleton, Oshkosh and Fond du Lac. Increasing numbers of Wisconsin residents are choosing to pursue outdoor recreational and educational opportunities within such driving distances and the result may be an increase in demand for such opportunity beyond current projections. This property is inaccessible (except by water) from two directions, includes lands several miles beyond the ends of deadend access roads, and (when acquisition is complete) will provide a continuous block of over 4,000 acres of public lands. These characteristics will make this property even more attractive to day-users seeking outdoor recreational and educational experiences.

ANALYSIS OF ALTERNATIVES

1. Do Nothing:

The alternative of state ownership with no management would result in gradual deterioration of impoundment dikes. Over time, the dikes would lose their capability to hold water and the impounded areas would become homogenous with the wetlands lying outside of impounded areas. The heterogeneity of the vegetation in these areas would decrease to nearly monotypic sedge or cattail stands in deeper marsh areas to shrub-carr on slightly higher sites. The cessation of prescribed burning and the resultant vegetative succession would hasten these changes to less productive wildlife habitat.

Abandoning the almost completed shoreline stabilization program would jeopardize the public's considerable investment in rock riprap as those unprotected areas would continue to erode back into the wetlands and eventually behind the riprap already installed. Considering the physical and biological results of this nonmanagement alternative, it is axiomatic that a decrease in carrying capacity for certain wildlife species and an associated decrease in resource-based recreational and educational activities will almost certainly result.

2. Reduce Scope:

Reducing the scope of the recommended development and management plan involves reducing the acreage goal and thus the acquisition effort.

Land in the N 1/2 of Section 22 and the E 1/4 of Section 16 are included within the boundary for eventual acquisition as these parcels become available because the resource managers responsible for the management of this property from its inception right up to the present recognized the wildlife and fishery values of these lands. The wildlife values of the type III/IV wetlands in Section 22 are of no less importance than those of identical lands elsewhere within the interior of the property.

The difference between them stems from their location in relation to the rest of the state-owned lands of this property. Being situated on the periphery of the property and not being surrounded by state-owned lands, the desirability of ownership of these "edge" parcels compared to interior parcels may be decreased if the land acquisition budget becomes restricted.

Development of this property has been completed to the extent that continued maintenance of dikes and water control structures will continue to accommodate present user and productivity levels. The only development recommended involves the placement of one water control structure with the upgrading of about 1,400 feet of dike in conjunction with this structure and the possible expansion of a waterfowl nesting island and wood duck house erection program. These relatively minor development projects, if reduced in scope, would cease to be effective development measures.

The current recommended management program prescribes only the minimal maintenance activities of water control structure operation, prescribed burning, dike maintenance, and informational posting and maintenance of parking facilities. Reduction in scope of any of these management activities implies discontinuing that particular activity. Discontinuing maintenance and ongoing management activities, in turn, results in the "do nothing" alternative previously described.

3. Enlarge Scope:

The current property boundary reflects the boundaries of the wetlands associated with the confluences of the Pine River, Willow Creek, and Pumpkinseed Creek with Lake Poygan. Enlarging the property acreage by extending the boundary to the north, south or west would encompass upland areas that are currently farmed. Most of these uplands lie a considerable distance from high quality waterfowl brood-rearing waters and acquisition to provide waterfowl nesting areas would not be advisable.

The current habitat development technique of creating nesting islands for waterfowl may be enlarged upon and in fact is recommended -- providing that the current development project proves to be effective. Generally, a wood duck house program is effective when 50% of structures are successfully utilized by wood ducks. At this level of use, a development project for wood ducks may be enlarged upon.

Virtually no potential exists for enlargement of flowages or impounded areas beyond the recommendation made for the small impoundment development in Section 11.

RECOMMENDED MANAGEMENT

The recommended property development and management plan utilizes, in part, the concept of all alternatives. It appears acquisition has slowed considerably as the more easily obtained parcels were secured. In some areas of the property, the "do nothing" alternative will prevail until acquisition becomes completed enough to provide for management activities such as prescribed burning to control vegetational succession. The property's acreage goal and boundary have been reduced in scope to accommodate elimination of those parcels developed as residential areas since the original boundary and goal were approved. Increasing the scope of the habitat development program is contemplated only providing the current experimental development techniques prove successful.

APPENDIX A
Master Plan Comments

By: Henry Kolka
Representing: Wild Resources Advisory Council
Date: September 9, 1981

The Wild Resources Advisory Council is extremely well pleased with Poygan Marsh Wildlife Area Master Plan Concept Element and the Council wishes to congratulate the Task Force of Tom Howard, Mike Primising, and Mike Falgert for their high level professional treatment of the property.

General Review

The Wild Resources Advisory Council commends the Poygan Marsh Wildlife Area Master Plan concept Element Task Force of Tom Howard, Mike Primising, and Mike Falgert for their assessment of resources involved and their proposed document ascribed by a favorable level of professionalism. The WRAC comments and recommendations are designed to further strengthen the Task Force's most exemplary document. Council's congratulations.

Comments and Recommendations

1. Page 1, Goal

WRAC recommends the addition of and education to complete the sentence following the word recreation. The Task force projects such a need in the two paragraphs under Recreation Needs and Justification on Page 13.

DNR RESPONSE: Text added.

2. Page 1, Item 3 under Annual Objectives

WRAC considers this a very credible proposal, however we suggest that its location be shown on the chart labeled Figure 2 and that its description and management be included in the text.

DNR RESPONSE: Figure corrected. Description under Historical and Archaeological Features Section judged adequate. No management will occur beyond site protection.

3. Page 1, Item 4. Annual Objectives

The objective projects 900 participant days of snowmobiling. The WRAC does not foresee any significant amount of wildlife disturbance from this activity but the Council does suggest that the trail be shown on a chart, most appropriately on Figure 2, Page 3.

DNR RESPONSE: Figure corrected.

4. Page 1, Item 2 under Annual Additional Benefits

WRAC recommends the interjection of and resident between the words migratory and endangered.

DNR RESPONSE: Concur; text added.

5. First paragraph under Management

The last sentence in the paragraph can only be assumed to indicate past policy for it definitely negates objective number one on page one.

DNR RESPONSE: Do not agree. Water levels are not maintained at levels which would eliminate use by duck broods.

6. Figure 2

This is an excellent general use chart. However the WRAC suggests the following additions:

- a. Inclusion of all service roads. (As portrayed, no roads are shown connecting parking sites: Sections 23, 10, and 11.)
- b. Snowmobile trail
- c. Historical and archaeological sites

DNR RESPONSE: Figures corrected.

7. Land Acquisition and Background Information

WRAC finds the figures used particularly confusing. Why not use the proposed acquisition numbers parallel with the figures in the table. The results of that table show the long-range wildlife area property goal as 4,238.92 acres. If we use net decrease acreage of 193.3 acres and subtract it from the 4,238.92 acres, the result is 4,045.62 acres. However, the text indicates the property goal at 4,054.3 acres and approved boundary of 4,201.25 acres. There should be a simpler and more understanding way of showing property goals.

DNR RESPONSE: Concur; text modified.

8. Current Management

WRAC recommends the insertion of and education between the words recreation and days.

DNR RESPONSE: Concur; text modified.

9. Page 1, last paragraph

WRAC recommends that the snowmobile trail be shown on chart.

DNR RESPONSE: Completed.

10. Page 9, second paragraph

The inventories of wildlife animals and plants though not complete are quite adequate and will suffice most of the nonconsumptive needs. The last paragraph under the heading of Fish and Wildlife admits the deficiency. WRAC suggests that a resolve to complete such a survey be incorporated in the paragraph.

DNR RESPONSE: Text added under Section I.

11. Historical and Archaeological Features

Since Annual Objective number 3 proposes to protect one historic site, the WRAC is disappointed in the consummation of this resolve:

1. Why one when two are listed?
2. Why not give this designation appropriate visibility?

DNR RESPONSE: Text corrected (two). Description under the Historical and Archaeological Features judged adequate.

12. First paragraph under Management Problems

WRAC agrees with the Task Force that the acquisition is extremely critical for the operational welfare of wildlife property. The Council supports this resolve and recommends NRB do likewise.

13. Recreation Needs and Justification

WRAC considers these two paragraphs under the above heading the most significant expression of the present and future public expectation of wild resources areas. The Council recommends following word additions:

- a. Heading, insert and education between the words Recreation and Needs.
- b. First sentence in first paragraph insert and educational between the words recreational and opportunities.
- c. Fourth line second paragraph insert and educational between the words recreational and opportunities.
- d. Last line second paragraph insert and educational between the words recreational and experiences.

DNR RESPONSE: Concur; text added.

14. Do Nothing Alternative

Last sentence. WRAC recommends the insertion of and educational between the words recreational and activities.

DNR RESPONSE: Text added.

15. Recommended Management

Excellent summation of management for the Poygan Marsh Wildlife Area.
WRAC endorses it and recommends it to the NRB for their approval.

By: R. W. Baker
Representing: Department of Transportation
Bureau of Environmental Analysis and Review
Date: August 25, 1981

We have reviewed the above-noted document and offer some general suggestions on the attached form. Though the Poygan Marsh Wildlife Area does not involve State Trunk highways, it does abut County Trunk Highway (CTH) "D" and is near CTH "H" both of which are on the Federal Aid System. We have not been informed of any proposed improvements of these roads nor of the town roads actually in the Wildlife Area, nevertheless we suggest that copies of this or subsequent documentation be sent to the County Board Chairman, County Highway Commissioner and appropriate township officials as well as the County Planning Office should routinely receive documents of this type.

We thank you for the opportunity to review and comment on this Master Plan.

DNR RESPONSE: Suggestions from form were incorporated into the plan. Local officials were included in the review process. Future plans will be routed accordingly.

By: Forest Stearns
Representing: Scientific Areas Preservation Council
Date: September 10, 1981

We have reviewed the Poygan Marsh Wildlife Area Concept Master Plan and find that the interests of the Scientific Areas Preservation Council are not adversely affected by the proposed development and management detailed in the master plan. Thank you for providing the opportunity to comment.

By: Thomas J. Evans
Representing: Geological and Natural History Survey
Mineral Resources Section
Date: August 26, 1981

The staff of the Geological and Natural History Survey has reviewed the Poygan Marsh Wildlife Area Master Plan. The following revision of the first two paragraphs under the Soils, Geology and Hydrology heading on page 8 is offered for your consideration. These changes clarify and correct the information on glacial deposits in the area.

"The Poygan Marsh Wildlife Area is entirely contained within the boundaries of a glacial- ~~deposit~~ lake basin which includes much of the eastern 1/3 of the county and extending eastward through Winnebago County.

Lacustrine clays ~~laid down by~~ deposited in glacial Lake Oshkosh and beds of fluvial sand and gravel ~~deposited laid down by~~ melt water of the Green Bay Lobe the Valders glacier (now covered by organic deposits on the wildlife area) cover the entire area. Interstratified beds of clays, sand, and gravel develop good artesian slopes in which contain numerous flowing surface wells are located. The abundant supply of underground water which concentrates in the ground moraine regions of central Waushara County provides hydrologic pressure to this formation. Several flowing wells are located on the wildlife area and on adjacent farmland.

I hope these suggested modifications will clarify the actual glacial geology situation in this area. Please contact me if you have any questions regarding our comments.

DNR RESPONSE: Concur; text modified.

APPENDIX B

PUBLIC MEETING SUMMARY

Wildlife area plan to be topic

POYGAN — A public information meeting regarding the Poygan Wildlife Area Master Plan is scheduled for 7 p.m. Thursday at the Wautoma Ranger Station, Wautoma.

The plan describes the history of the property, past and present management activity and outlines long range management plans for the future.

Such future plans include land acquisitions, goals, flowage management and habitat maintenance plans.

The Poygan Wildlife Area is on over 2,700 acres in the western end of Waushara County, near where Lake Poygan meets the county line in the town of Poy Sippi.

The master plan is currently being reviewed by various public and private agencies. Public comments and participation in preparing the final plans will be solicited at the meeting.

A meeting regarding the Poygan Wildlife Area Master Plan was held on Thursday, September 10, 1981 at the Wautoma Ranger Station at 7:00 PM. This meeting had been noted in both the Waushara Argus and the Oshkosh Daily Northwestern.

In attendance were 4 persons and myself (Tom Howard). I opened the meeting by distributing copies of the Master Plan and accompanying environmental impact assessment to those attending. I explained the Master Planning process, briefly described this particular plan and related it to large-scale photographs.

After going into detail explaining the proposed management and development plan, I asked for comments and questions. The following is a summary of the exchange between those attending and myself:

Q: Areas in sections 10 and 15 are flooded each fall. This makes bow hunting (deer) difficult. Will these areas be flooded every year?

A: The area in question is within a flowage. The primary goal of this management plan for this property regards the production of wetland wildlife and to provide compatible hunting recreation. These areas will continue to be annually flooded -- I then showed them alternate areas outside of flowages that could support bow deer hunting.

Q: Are there any plans for a duck refuge?

A: No -- I explained what was necessary for a refuge (size, continuity of ownership, etc.) and why a refuge would not be desirable here.

Q: Are there brochures available with good maps showing flowages, accesses, etc. as other large PHG's have?

A: No, the current state of ownership on this parcel is such that only 70-75% of acquisition has been completed. After ownership within approved boundaries is nearly complete, brochures may be prepared. In the interim, I marked their personal plat books to show current ownership.

Q: Are all areas on this property (state-owned) open for trapping?

A: Yes.

Further discussion regarded current deer populations, waterfowl hunting in this vicinity, land acquisition on other properties, etc.

The meeting was terminated at about 9:45 PM.

The only other comment or inquiry received by the originating Task Force was a single phone call from Radio Station WNAM in Neenah/Menasha on 7/28/81. They taped a 2-3 minute discourse by T. Howard on what a master plan was, what would be done on Poygan, if this process would be done on other public lands in "the Valley", etc.

By: Tom Howard

05740